

**Online Community Response to A Political Corruption Issue:
A Study of Sina Weibo in the Lei Zhengfu Affair**

by

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Abstract

This study conducted a content analysis of one of the most popular Chinese microblogging sites, Sina Weibo, to investigate how Chinese Internet users used microblogging in response to a well-known political corruption affair: Lei Zhengfu, a former secretary of Beibei District Party of Chongqing Province, was caught on video having sex with his 18-year-old mistress. This study conducted a content analysis of the content of microblog messages, information trends of messages in different categories over the period, and the information spreading process. This study explored the roles played by microblogging systems in response to the political corruption issues and enabled the researcher to gain insights into how to harness the power of microblogging to facilitate the process of anti-corruption activities. In addition, this work supplements existing works with an exploration of a non-Western socio-cultural system: how Chinese Internet users used microblogging to respond to a political corruption issue.

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List of Abbreviations

ICT Information and Communication Technology

SNS Social Networking Sites

Chapter 1

Introduction

In the era of Web 2.0, more and more evidence (Ellison, 2007; Palen, et al., 2009) shows that new media, especially Social Networking Sites (SNSs), play an important role as watchdogs in constructing and strengthening civil society. Yang Lan (2011), a journalist and entrepreneur who has been called “the Oprah of China,” once gave a TED talk on how the younger generations of Chinese citizens used microblogs (Weibo) to report injustices to their SNS networks. Social media serve as a valve to open information flow, because the traditional media in China are still heavily controlled by the government (Yang, 2011).

Web 2.0 and Social Networking Sites

In January 1999, the term “Web 2.0” was introduced to the public by Darcy DiNucci (1999) in her article, “Fragmented Future.” The huge breakthrough Web 2.0 made is that it extends from Web 1.0, which serves as a push media to a platform coordinating a large volume of knowledge, information, and cultural producers (Postigo, 2011). Web 2.0 began to increase in popularity, and in 2004, Tim O’Reilly hosted the first Web 2.0 conference to understand the remarkable changes in the nature of websites and web-based services such as Social Network Services (O’Reilly, 2007). He defined the Web as a platform where customers are building business for operators, which means the biggest difference between Web 2.0 and Web 1.0 is the shift in the role of customer from a passive receiver to an active producer of information and knowledge.

Web 2.0 describes Web-based technologies, especially Social Networking Sites (SNSs) such as Facebook, YouTube, Instagram, Vine, Reddit, Twitter, Mixi, Bebo, and

Cyworld. SNSs refer to websites where users can create public or semi-public profiles, publish personal content and form relationships with others sharing the same personal or professional interests by viewing profiles of others within the system. The appeal of SNSs is not that they allow users to meet strangers, but that they enable users to make their social networks visible (Ellison, 2007). Since their introduction, SNSs have attracted millions of users and have been created in different languages all over the world, such as Twitter in the U.S., Weibo in China, and Ameba in Japan. Among different microblogging systems in China, Sina Weibo is the most active social space for Chinese Internet users.

Overview of Sina Weibo

Sina Weibo is a Chinese microblogging system launched by Sina Corporation in August 2009 (Chen, Zhang, Lin & Lv, 2011). Akin to a hybrid of Twitter and Facebook, Sina Weibo firmly established itself as the leading microblogging platform and one of the largest Chinese Internet content providers in China (Chen, Zhang, Lin & Lv, 2011). By August 2011, it reached 200 million users, and the average number of new accounts per day was 460,000 (Chen, Zhang, Lin & Lv, 2011). According to Cao (2012), Sina Weibo users posted about 100 million messages each day.

Sina Weibo shares many of the same features with Twitter. First, its interface is similar to Twitter. Second, users have to follow others to make their posts appear in users' own timeline. Third, it enables its users to send and read messages of up to 140 characters. Fourth, users mention other people using an "@UserName" format, group posts together by topic by adding hashtags with a "#HashName#" format, and re-post with "//@UserName," similar to Twitter's function of "RT @UserName." Fifth, it enables users to upload and publish video and pictures within the post. This feature was not available on Twitter until recently. The difference between Sina Weibo and Twitter is Sina Weibo is more localization,

while Twitter is more globalization (Chen, Zhang, Lin & Lv, 2011). This is because the Internet users in the mainland of China are not able to access Twitter.

Better than other traditional Chinese media, Sina Weibo is a platform with more freedom of speech. However, Sina Weibo is watched by censors. Reuters (2013) reported that Internet firms have to follow the propaganda apparatus of the Communist Party and censor every message before publishing. According to the report (Reuters, 2013), messages containing “must kill” words such as Falun Gong, which refers to a banned spiritual group, are strictly blocked by Sina’s computer system. For most messages that are less sensitive messages, published comments are only visible to its author (Reuters, 2013). Cooperation with the Communist Party is a way to prevent Sina Weibo from being shut down since Sina Weibo still serves as a platform for people to communicate with each other (Reuters, 2013). From Lei’s case, a highly ranked government official was taken down after only 63 hours when his screenshots appeared on Sina Weibo; it is not hard to see the breakthrough made not only by Chinese Internet users, but also the Sina Corporation and Chinese government.

The Chinese government regards censorship as key to maintaining its power; however, it still wants to give people platforms to blow off steam when other forms of political protest are restricted (Reuters, 2013). This makes Sina Weibo fitting within China’s political debate.

Sina Weibo has become a battlefield for Chinese Internet users to bring down government officials with corruption issues, such as “flirting director” Xie Zhiqiang (China Daily, 2011), “watch-wearing brother” Yang Dacai (Chang, 2013; Noesselt, 2013), and “uncle house” Cai Bing (Noesselt, 2013). According to China Real Time Report (2011), on June 2011, Xie Zhiqiang, the former director of Liyang City Sanitation Bureau, was fired when he was caught flirting and setting a licentious appointment with his mistress on Sina Weibo without noticing that all messages he posted went public. Yang Dacai, a former head of Shaanxi Provincial Bureau of Work Safety, was thrown into hot water after his grinning

pictures at a bus crash scene went viral on Sina Weibo in August 2012, as BBC News (2012) reported. He then was fired after Weibo users found him wearing a multitude of expensive watches. Cai Bin, the so called “uncle house,” former head of urban management bureau in the district of Panyu of Guangzhou Province, was removed from his position after investigators confirmed he owned 22 houses, according to the Wall Street Journal (2012). Earlier in October 2012, Web users posted information about Cai’s ownership of multiple houses on a website. The message was then posted to Sina Weibo and received a lot of attention from Sina Weibo users.

This study used the word “post” for publishing microblog messages, which is analogous to the term “tweet” in the Twitter system. The word “re-post” was used for forwarding existing microblog messages, which shares the same meaning with “retweet.” The term “message” was used to cover both post and re-posted messages.

Overview of the Lei Zhengfu Affair

Lei Zhengfu was a party secretary of Chongqing’s Beibei District in China. He was dismissed from his position just 63 hours after his explicit screenshots were published on Sina Weibo. The encounter turned out to be a sting operation by a property developer hoping to blackmail Lei into favorable commercial decisions (Jones, 2013).

Lei was thrust into the spotlight after screenshots and video clips went viral online. This content captured images of the portly, pop-eyed 55-year-old former regional Communist Party official having sex with his 18-year-old teenage mistress Zhao Hongxia (Jones, 2013). On November 20, 2013, at 16:00, a series of hotel room sex screenshots titled “Lei, the secretary who accepts sex bribes,” were published on a personal website called “Civil Supervision” built by Zhu Ruifeng (2013). Four hours later, this information was put on Sina Weibo by famous investigative journalist Ji Xuguang (2012a; 2012b). However, this Weibo message was soon deleted by Ji because he thought more confidential evidence was needed

(Ji, 2012a). After a five-minute phone interview with Lei and with the help from Chongqing's media, Ji (2012a; 2012b) created the first Weibo news on his personal Sina Weibo page at 23:59 on November 20, 2012. Ji chose Sina Weibo to publish this information, rather than petition the disciplinary authorities or write a report for his employer, the Southern Metropolis Daily. This is due to Weibo's transparency and speed, as well as the strict censorship of traditional media (Zhang, 2013). Because of the popularity of Sina Weibo in China and the impact of Ji Xuguang (Ji's microblog has been selected as one of the top ten Grassroots Microblogs in China in the *Report of China's Microblog Impact Investigation* <2011>), Sina Weibo users started to pay attention to this case, which resulted in its quick escalation. Ji wrote in his blog (2012a) that, within one day, his Sina Weibo follower count increased by 15,000, and millions of people were paying attention to Lei's case (Ji, 2012a). On November 21, at 14:23, Chongqing Municipal People's Government Information Office (2012) posted a message that announced the Chongqing Municipal Commission for Discipline Inspection had been aware of this real name reporting, and were verifying the details of the case. With the increasing influence of this case, other media started to try to verify information by interviewing Lei, who was renouncing the promiscuous video as deceitful. On November 23 at 11:06, a Chongqing Municipal People's Government Information Office (2012) official made an announcement on Sina Weibo, saying that the government had proven the male shown in the video was Lei Zhengfu himself, who would be stripped of all his official duties.

Overall, it took only 63 hours from the first release of sex screenshots on Sina Weibo by Ji to the final decision of removing Lei from his official position, which was one of the quickest responses of an official investigation (People's Daily, 2012).

Because of the specific national condition including limited freedom of speech (Yang, 2011) in China, except for the constant interference by China's army of online censors, Weibo is still an online space where Chinese people can enjoy a modicum of free expression. This 63-hour anti-corruption case distinctly demonstrated the power of new media. Lei's case is just a small part of a long-running show of anti-corruption fights on Sina Weibo in China. However, this researcher chose this case because it took less than three days to complete all the investigation and remove Lei from his position, whereas investigations of other scandals took one month to half a year before implementing the consequences. The impact of the Internet, especially microblogging systems, has greatly increased.

To better understand the role played by microblogging systems during anti-corruption activities, and how anti-corruption information is spread through these social media, this study conducted a content analysis of the Lei Zhengfu affair to investigate how Sina Weibo, a popular Chinese microblogging system, was specifically used during the 63-hour anti-corruption case. Combining an analysis of message content, analysis of distributions of categories over time, and information spreading analysis, this study attempted to understand information dynamics during anti-corruption activities in microblogging systems in China.

Chapter 2

Literature Review

This chapter incorporates studies of crisis informatics, with an emphasis on the application of microblogging systems and other SNSs during crisis responses. This chapter also includes research findings about the roles of SNSs in political elections and information diffusion. In addition, this chapter also concludes with the research questions and hypotheses that will be tested.

Crisis Informatics

Crisis accompanies the development of human society and the world is facing more and more crises (Hagar, 2006b). Crisis – “a specific, unexpected, and non-routine event that creates high levels of uncertainty” (Seeger, Sellnow & Ulmer, 1998) – has “a potentially negative outcome affecting the organization, and company, as well as its publics, products, services, or good name” (Fearn-Banks, 2011). These events can be divided into several kinds, such as natural disasters, public health incidents, cultural crises, and accidents (Fearn-Banks, 2011).

Crisis situations have been studied from several perspectives, such as risk communication, crisis management, crisis systems, and information environment (Hagar, 2006a). Crises usually precipitate complex information environments (Hagar, 2012) and large-scale emergency response (Palen et al., 2010). People encounter different information challenges during crisis responses (Hagar, 2006a), including information overload or information lack, changing needs of information over different time periods, and information uncertainty and credibility (Hagar, 2006a).

The term crisis informatics was first introduced to the public by Hagar (2006b), who already defined it as “the interconnectedness of people, organizations, information, and technology during crises” (Hagar, 2012). Crisis informatics examines how information is disseminated within and between formal and informal channels (Palen, et al., 2009; Palen, et al., 2010) during emergency responses, as well as how technology and people transform each other (Hagar, 2006b). The research of crisis informatics emphasize the application of ICT in crisis situations (Hagar, 2006b). As an interdisciplinary area of study (Hagar, 2012), crisis informatics analyzes the crossed paths of society, technology, and information during different phases of crisis, including preparation, response, and recovery (Hagar, 2013).

Perspective of Trust in Crisis Informatics

The basic concern of trust is how people manage expectations (Handy, 1995). Trust is established when people’s expectations are met (Semaan, Mark & Al-Ani, 2010). Serving as a mediator in information-seeking and interactions (Semaan, Mark & Al-Ani, 2010), trust is able to facilitate learning (Choi & Lee, 2000) and knowledge exchange (Davenport & Prusak, 1998) among individuals, increase cooperation, and improve a relationship’s quality (Hagar, 2013). Under uncertain conditions, the level of how much people trust in others affects the level of information they gain from others (Hagar, 2013; McDowell, 2002). Hagar (2013) pointed out that the existing relationships affect which sources of information will be trusted. Lack of trust in crisis leads to the rumor mongering (Hagar, 2013). With the increasing use of SNSs, such as Facebook, Twitter, Instagram, and YouTube, rumors spread at an unprecedented speed (Hagar, 2013). Thus, it is important for people to choose and act upon credible information sources (Hagar, 2013).

However, a “socially-produced accuracy,” instead of rumor-mongering, was detected in the participation of the general public on SNSs after the 2006 Virginia Tech shooting (Vieweg, Palen, Liu, Hughes & Sutton, 2008). In this tragedy, people were facing the

discourse around death (Vieweg, Palen, Liu, Hughes & Sutton, 2008), where the respect for lives was demanded when reporting names of victims.

Basically, there are two dimensions of trust: cognitive trust and affective trust (McAllister, 1995; Wilson et al., 2006). Cognitive trust refers to people's beliefs about others' competence (McAllister, 1995) and performance (Semaan, Mark & Al-Ani, 2010). Affective trust refers to people's beliefs about others' sincerity (Semaan, Mark & Al-Ani, 2010), which is aroused from "emotional ties among group members" (Wilson, Straus, & McEvily, 2006). Semaan et al. (2010) conducted 40 interviews with civilians living through the Israel-Lebanon war in August 2006, and 45 interviews with Iraqis experiencing the Gulf War starting in March 2003. Findings of this study (Semaan, Mark & Al-Ani, 2010) demonstrated that technologies were able to help people suffering a crisis to maintain trust, which made uncreative new technologies catered to the demands of people facing unpredictable crises (Semaan, Mark & Al-Ani, 2010).

The Use of Traditional Technologies in Crisis Informatics

Although the term had not been coined by Hagar (2006b) until 2006, the research of crisis informatics has long begun. Scholars (Carey, 2002; Birowo, 2010) have examined the roles of traditional media in information dissemination from a traditional technology perspective (Hagar, 2006b). Carey (2002) discussed the roles of traditional television in information dissemination and coordination during crisis responses. Carey (2002) reported in his study of September 11 that over 50 percent of Americans acquired the news of terrorist attacks from television. Eighty percent of Americans viewed television as main source for information after being aware of the crisis (Carey, 2002). Other than serving as a platform of providing crisis-related information, television also helped to relieve shock and sadness of the general public by providing regular entertainment programming (Carey, 2002). In addition,

Carey (2002) pointed out two important roles played by radio: gaining the latest information while driving and helping relax the moods by listening to the music.

Birowo (2010) examined the role of community radio as a medium of communication before, during, and after natural disasters in Indonesia. Radio enabled the information disseminating not only among affected people, but also between the people and other actors such as NGOs and local government when other mass media infrastructures were destroyed. In addition, community radio played an important role in helping to connect missing people, distributing information about disaster damages and recovery situations, and encouraging people by providing entertainment. What's more, community radio acted as a mechanism to raise people's awareness of crisis management. What makes the community radios' response in Indonesia unique is the participation of local people. Unlike professional media workers, volunteer reporters were directly involved in the local communities (Birowo, 2010).

However, the limitations of traditional media appeared with the emerging of new ICTs. Shklovsti, Palen, and Sutton (2008) pointed out that many people interpreted traditional broadcast sources as unable to provide necessary information. In addition, national media lost credibility to local residents because of their unfamiliarity of the areas on which they were reporting (Shklovsti, Palen, and Sutton, 2008). Members of the public tended to verify crisis information disseminated through traditional mass media and locate more detailed information using other ICTs (Hagar, 2001; Shklovsti, Palen & Sutton, 2008), which were viewed as an important mechanism of interaction.

The Use of Mobile Live video in Crisis Informatics

With the rapid development of information and communication technology (ICT) and Social Networking Sites (SNSs) in modern society, it is becoming easier and easier for people to get in touch with anyone who lives in the global village (McLuhan & Powers, 1989). With the advent of electronic communications, the world has been shrinking (Speidell

& Sappenfield, 1992). Cairncross (2001), senior editor for *The Economist*, outlined a concept, “the death of distance,” which means that people are living in a world created by digital communication technologies where the miles have little to do with the ability to interact with each other.

With the development of technology, society has witnessed various new information technology services (Landgren & Bergstrand, 2010), including mobile live video technology (Bergstrand & Landgren, 2009). Berstrand and Landgren (2009) conducted four workshops to examine the relationship between the current problems of handling traffic accidents and potential technical solutions. The LiveResponse application incorporated with dynamic map services, and live video support (Berstrand & Landgren, 2009) was designed to support their research. The results of this study demonstrated that mobile live video is able to deliver situation specific information, which is useful for general actors during crisis responses. Further, Landgren and Bergstrand (2010) identified typical use of video for response workers in emergency responses. Mobile video is able to provide en route traffic situation updates, make time-critical situation reporting, and keep after-incident documentation (Landgren & Bergstrand, 2010).

The Use of Microblogging Systems and Other SNSs in Crisis Informatics

SNS applications, especially microblogging applications, are experiencing a rapid increase in their user-oriented foundation as well as formalization into big media, cooperating communications and government communications (Starbird & Palen, 2010). Research about SNS application in crisis informatics is an area of work that is attempting to keep up with the high velocity of technological development.

The Use of Microblogging systems and Other SNSs in Terrorist Attacks

Public members regularly seek out reliable information in the immediate post-disaster time period because of expanding developing ICTs (Palen & Liu, 2007). People began to turn

to the Internet for more information after the tragic September 11 terrorist attacks (Schneider & Foot, 2002) because the mobile telephony antennas located on top of towers were destroyed and other telecommunication infrastructures were down (Palen & Liu, 2007). Terrorism has been perceived as a major threat of the changing political arena (Vieweg, Palen, Liu, Hughes & Sutton, 2008).

Cheong and Lee (2011) proposed a framework to utilize Twitter as a database to harness “demographic analysis” (Cheong & Lee, 2011) of crisis informatics within the domain of terrorism. The 2009 Jakarta and Mumbai terrorist attacks were studied from four individual phases of the framework including “breaking news,” “data harvesting and spam filtering,” “sentiment detection & demographic exploration of the message pool,” and “data mining and reporting” (Cheong & Lee, 2011).

Vieweg, Palen, Liu, Hughes, and Sutton (2008) noticed participation by public members on social networking sites, which were increasingly used to interact with peers under routine conditions, following the crisis at Virginia Tech on April 16, 2007, where a shooter killed 32 people (Palen, Vieweg, Sutton, Liu & Hughes, 2007; Vieweg, Palen, Liu, Hughes & Sutton, 2008). Researchers conducted on-site interviews and monitored on-line interactions. The findings demonstrated that decentralized “problem-solving” occurred in a concentrated and self-organized way including behavior of sharing sensitive information guided by developing roles and norms to somehow mitigate the disaster’s effects (Vieweg, Palen, Liu, Hughes & Sutton, 2008). In addition, collective intelligence was raised efficiently by the using of SNSs, including Facebook, during crisis responses (Palen, Vieweg, Liu & Hughes, 2009; Vieweg, Palen, Liu, Hughes & Sutton, 2008).

The Use of Microblogging Systems and Other SNSs in Public Health Affairs

At this time period when blogs were not that well known, farmers had already learned to use computer-based media during the 2001 UK farming crisis (Hagar & Haythornwaite,

2005). They explored how information could be coordinated and disseminated in time. The imbalanced situation caused by the crisis was able to accelerate the new developments of network such as the Pentalk Network. The Pentalk served as a “grassroots organization” to provide free Internet and email access for farmers, which led them to updated information and helped reduce isolation (Hagar & Haythornwaite, 2005).

Research stated that the United States was facing three major health issues as the results of terrorism: bioterrorism, mass disasters, and remote military operations (Teich, Wagner, Mackenzie & Schafer, 2002). Scholars suggested several ways to accomplish the goal of better coordinating information among local, regional, and national agencies: deploying bio surveillance and bio-agent detection, supporting research for early diagnosis and identification, consolidating educational resources for the medical provider and the public, and removing barriers for the exchange of “de-identified public health information” (Teich, Wagner, Mackenzie & Schafer, 2002).

The use of ICTs within public health affairs is able to help reduce costs and increase the quality of health care (Anderson, 1997). On the contrary, panic may be aroused by the strict control of information (Tai & Sun, 2007). For example, during the outbreak of Severe Acute Respiratory Syndrome (SARS) in China in 2003, the Chinese government purposely blocked information from being released to the general public (Palen & Liu, 2007; Tai & Sun, 2007), resulting in decreased trust in the government and increased panic among the general public. The first known SARS case occurred in Guangdong province on 16 November 2002 (Tai & Sun, 2007). However, the Chinese government did not release this news until 11 February 2003 (Financial Times, 2003; Xinhua News Agency, 2003). The widespread rumors finally forced the Chinese government to respond and release information (Tai & Sun, 2007). During the crisis response, the Internet became important when the epidemic spread from contaminated areas (Tai & Sun, 2007).

The Use of Microblogging Systems and Other SNSs in Natural Disasters

With the increasing development of ICTs, users began to learn how to shift their role from passive receiver to active producer (O'Reilly, 2007) by using different media technologies. A participatory culture emerged during the December 2004 Indian Ocean tsunami when people began to use new personal ICTs, including photo-repository sites (Liu et al., 2008). More and more user-oriented ICTs fit to meet the needs of natural disasters keep emerging, such as housing aggregators, people-finding activity, and map-based mashups (Palen and Liu, 2007; Torrey et al., 2007; Berstrand & Landgren, 2009).

Palen and Liu (2007) studied the 2005 Hurricane Katrina disaster and found that shelters with networked computers emerged as information hubs in emergency events. Torrey et al. (2007) also studied the tragic Hurricane Katrina disaster and found that small blog communities use a centralized authority structure to foster trust, while larger forums have more difficulties in developing trust (Torrey et al., 2007). In another study of Hurricane Katrina, Shklovski et al. (2008) researched New Orleans musicians and found that the creation and discovery of online space had become virtual instantiations of the physical environments (Shklovski et al., 2008).

The era of Web 2.0 has witnessed the rapid emergence of Social Networking Sites (SNSs), such as Facebook, MySpace, Twitter, Weibo, and Renren as tools and forums for collective disaster-related sensemaking (Starbird & Palen, 2010). Within the perspective of crisis informatics in natural disasters, different aspects have been examined by scholars, including SNSs' role in crisis responses, quality of information that spread through SNSs, and information dissemination trends. Li and Rao (2010) explored the quality of information regarding the 2008 China earthquake on Twitter and efficiency of Twitter in adding value through the process of collective intelligence. They selected 2,130 tweets from May 12, 2008, to June 12, 2009, and analyzed them from five dimensions: timeliness, accessibility, accuracy,

completeness, and collective intelligence (Li & Rao, 2010). Results showed that microblogs are effective as the supplement to traditional information channels for information coordination and dissemination in the aftermath of disaster. Traditional media are by nature limited when there is a need to gather as much information as quickly as possible due to the complicated process of publishing (Ji, 2012a; Johnson & Kaye, 2004). They are good at providing authentic and in-depth information. However, microblogging systems are efficient at gathering and spreading messages as soon as possible (Ji, 2012a).

In another study of Twitter use in natural hazard events, Vieweg et al. (2010a) used the Twitter Search API and got a sample of 49 users and 19,162 tweets for Red River and 46 users and 2,779 tweets for the Oklahoma Grassfire. Throughout the study, they provided an examination of Twitter data with respect to geo-location, location referencing and situational update information in two natural hazards-based data sets (Vieweg et al., 2010a). They concluded that geo-location information is important to convey messages about an emergency, and situational updates and geo-location tweets are more likely to be re-posted than other on-topic tweets (Vieweg et al., 2010a).

Referring to non-Western socio-cultural systems, Qu studied one of the most popular online discussion forums in China, Tianya forum (Qu et al., 2009), and later one of the most well-known microblogging systems, Sina Weibo (Qu et al., 2011). In the study of Tianya forum, Qu et al. (2009) categorizing 2,266 messages from Tianya into sixteen non-exclusive classes, which were then grouped into eight higher-level categories, including “information-related messages,” “opinion-related messages,” “action-related messages,” “emotion-related messages,” “community-building messages,” “sense-making messages,” “anti-social messages,” and “off-topic messages” (Qu et al., 2009). Qu et al. (2009) defined four important platforms provided by the forum, including information sharing, seeking, gathering, and integrating; opinion change; action-increasing; and emotional support. In the study of

Sina Weibo, Qu et al. (2011) collected 94,101 microblog posts and 41,817 re-posts related to the 2010 Yushu Earthquake during a 48-day period immediately after the earthquake (Qu et al., 2011). They did a content analysis to explore what kind of messages users posted after the natural disaster and did a trend analysis to see the attention shift over the time period (Qu et al., 2011). Four major categories were defined, including “information-related messages,” “action-related messages,” “opinion-related messages,” and “emotion-related messages” (Qu et al., 2011).

All these studies (Berstrand & Landgren, 2009; Hagar & Haythornwaite, 2005; Li & Rao, 2010; Palen and Liu, 2007; Palen, Vieweg, Liu & Hughes, 2009; Qu et al., 2009; Qu et al., 2011; Shklovski et al., 2008; Starbird & Palen, 2010; Tai & Sun, 2007; Torrey et al., 2007; Vieweg et al., 2010; Vieweg, Palen, Liu, Hughes & Sutton, 2008) show that disaster-related citizen participation is getting more and more support from Social Networking Sites (SNSs) because of the relevant and useful information provided in them. In addition, scholars hold the opinion that the use of social media, including microblogs, is able to help people raise the situational awareness in safety-critical situations (Vieweg, Hughes, Startbird & Palen, 2010a; Vieweg, Hughes, Startbird & Palen, 2010b). Perhaps the microblogging systems may also be able to raise the situational awareness in other cases such as political corruption events and perform many more functions.

Microblogging Systems and Political Elections

The development of SNSs as platforms for information and opinion exchange has engendered much speculation about the implications for democracy (Koop & Jansen, 2009). SNS has been considered by most scholars an inexpensive and instantaneous way for citizen deliberation (Koop & Jansen, 2009) while miles have little to do with it (Cairncross, 2001; Speidell & Sappenfield, 1992), as well as a creator for additional public spaces for democratic dialogues (Koop & Jansen, 2009). For example, compared to the traditional

media, Woodly (2008) highlights a blog's role in setting agendas, mobilizing opinions, providing information, and effectively participating in politics (Woodly, 2008). However, opposite opinions exist. When Sunstein (2008) studied the BC Votes discussion board during the British Columbia 2001 provincial election, he questioned the blog's ability as a vehicle of political deliberation to aggregate dispersed bits of information.

Within the domain of democratic deliberation, most scholarly works (Smith & Rainie, 2008; Williams & Gulati, 2008) are about political elections with an emphasis on SNS's effect on real-world politics. In 2008, Barack Obama was elected as the 44th president of the United States. By the end of March 2008, Obama had over 725,000 supporters on Facebook compared with 100,000 supporters for McCain (Williams & Gulati, 2008). Thirty-five percent of Americans watched political videos online, 10 percent of Americans used SNSs to gather campaign information, and 6 percent of Americans made political contribution online (Smith & Rainie, 2008). Cornfield (2008) once stated that it was the connection Obama made with millions of people online that made him the president of the United States. The successful use of social media, including Facebook, YouTube, MySpace, and Twitter, has established them as an integral and powerful part of the political campaign toolbox (Cornfield, 2008). Whether politicians want to communicate with electorates and mobilize supporters or SNS users want to know what is going on, social media is a valuable indicator of political opinion (Williams & Gulati, 2008).

Researchers have studied political elections of different countries in depth. For example, Tumasjan & Sprenger et al. (2010) did a content analysis of over 100,000 messages during the 2009 German federal election and found that Twitter is a platform for online political deliberation, and the mere number of tweets regarding a party reflects the election results (Tumasjan & Sprenger et al., 2010). In addition, the sentiment of Twitter messages closely corresponds to parties' and politicians' positions, indicating that the content of

Twitter messages plausibly reflects the offline political landscape (Tumasjan & Sprenger et al., 2010). Larsson and Moe (2011) also studied Twitter in the 2010 Swedish election and identified different user types based on how high-end users utilized the Twitter service. They suggested that Twitter is primarily used for information exchange and sharing rather than real conversation (Larsson & Moe, 2011). There is an interesting opinion that the distribution of news and information broadens the public sphere; however, the proportion of valid and active users remains small (Tumasjan, Sprenger et al. 2010). In addition, Voogd et al. (2012) investigated tweet usage during the French presidential election campaign and analyzed the potential relationship between political polls, traditional media exposure, and social media content.

Ethical Concerns

With the increased use of social media tools, the ways in which people communicate during crisis responses have changed. The concern of ethical problems occurred (Heverin, 2011). Marx and Archer (1971) stated that citizen participation in law enforcement activities had greater risk of abuse and error. “In-person violence” (Citron, 2009) could be caused by “distributed surveillance” and amplified through the use of ICTs.

The amount of targeted individuals is big (Cheung, 2009; Liang & Lu, 2010). As a double-edged sword, the Internet is able to pull targeted individuals into violence in the real world (Cheung, 2009), and even cause trouble for their families. Pan (2010) studied one of the Human Flesh Search (HFS) forums at the website Mop. The research results suggested there was not necessary connection between “empowerment of regular citizens” and “equal power distribution” (Pan, 2010). Contradictionally, cyber surveillance tended to create power imbalance (Pan, 2010) between the searchers and the targets.

Information Diffusion in Microblogging Systems

Under the umbrella of Web 2.0, it is hard to deny that Social Networking Sites (SNSs), including microblogs, have already moved into the mainstream (Keen, 2007). Microblogs have become a necessity in people's lives, intricately woven into their daily routines. Recent years have seen many studies (Berstrand & Landgren, 2009; Hagar & Haythornwaite, 2005; Li & Rao, 2010; Palen and Liu, 2007; Palen, Vieweg, Liu & Hughes, 2009; Qu et al., 2009; Qu et al., 2011; Shklovski et al., 2008; Starbird & Palen, 2010; Tai & Sun, 2007; Torrey et al., 2007; Vieweg et al., 2010; Vieweg, Palen, Liu, Hughes & Sutton, 2008) on microblogging systems, with a large proportion on information diffusion or information dissemination within this system. As an established convention in microblogging systems, the activity of re-posting propagates the original messages to a new group of audiences, thus making it the key mechanism and a powerful way to disseminate information in microblogging systems (Suh, Hong, Pirolli & Chi, 2008).

Basically, the research methods of information diffusion can be divided into two categories: content analysis and diffusion network analysis (Liu, Liu & Li, 2012). Adopting the method of content analysis (Liu, Liu & Li, 2012), researchers usually employ relevant statistical tools to find out characteristics of information diffusion, focusing on the characteristics of re-post messages and different content characteristics between re-post messages and original messages. For example, Zarrella (2009) analyzed basic characteristics of re-posts from several different aspects, including the presence of URLs, linguistics, psychology, and timing. The report showed that the presence of a link might increase the probability of re-posting, because 56.69 percent of the re-tweets contained a link while only 18.96 percent of the original tweets included a link. In the report, Zarrella (2009) also listed 20 most re-tweetable words and phrases, including *you*, *twitter*, and *please*, as well as 20 of the least re-tweet-able words, such as *haha*, *lol*, *work*, and *bored*. In addition, results (Zarrella,

2009) showed that the influence of readability grade levels, psychological attributes, and different time within a day could not be dismissed. Suh et al. (2010) also found that URLs and hashtags are among content features useful in enhancing the re-tweet rate. They collected a data set of 74 million tweets to examine the content and contextual factors that may be associated with the re-tweet-ability of tweets (Suh et al., 2010). They also found that, among contextual features, the number of followers and followees, as well as the age of the account seem to affect re-tweet rate (Suh et al., 2010). However, the number of past tweets was not correlated to the re-tweet-ability of a user's tweets (Suh et al., 2010).

Above simply analyzing the characteristics of re-posted messages within the content analysis domain, researchers also explored users' influence over the re-post rate. For example, Meeyoung et al. (2010) studied users' influence over Twitter and found that users' popularity was driven by the name value of the user. Business people, news sites, and content aggregation services were the most re-tweeted users (Meeyoung et al., 2010). In addition, users gained influence through concerted efforts (Leavitt et al., 2009). Leavitt et al. (2009) tracked 12 popular Twitter users and divided users' influence into two types: conversation-based and content-based. They found that celebrities were better at making conversation while news media were better at spreading content. In addition, the verification of user accounts could also help increase the re-post rate (Zhao, 2013). Verification systems serve as an assistance to help users to build their credibility (Zhao, 2013). Sina Weibo mainly offers verification to four major groups of people: (1) entertainers, athletes and artists; (2) experts in some certain fields; (3) well-known corporations and news media; (4) people involved in influential news (Zhao, 2013).

Rather than focusing only on characteristics of information spreading in microblogging systems during a specific period of time, researchers adopted the diffusion network analysis to focus on the characteristics of information dissemination from a dynamic

diffusion perspective through building an information diffusion network (Liu, Liu & Li, 2012). Speed, scale, and range have been considered as the three major properties of information dissemination systems (Liu, Liu & Li, 2012). For example, through building an information diffusion tree, Kwak et al. (2010) found that for the analysis of speed 50 percent of re-posts take place within 1 hour, 75 percent within a day, and 10 percent after a month. For the analysis of scale, they stated that a message is likely to get to a certain number of impressions despite the number of followers the user has (Kwak et al., 2010). For the analysis of range, the results showed that for most, the number of re-posts is between 6 and 11 (Kwak et al., 2010). In the research of Yang and Counts (2010), in terms of speed and scale, they found that the amount a user is mentioned is a good predictor of producing offspring and child nodes. There are few factors to predict the number of re-posts in the diffusion network (Yang & Counts, 2010). Messages posted by active authors (Yang & Counts, 2010) are more likely to be re-posted. Messages posted at an earlier stage have better chances to continue disseminating (Yang & Counts, 2010). Interestingly, different from Zarrella (2009) and Suh (2008), they stated that containing URLs does not help increase re-tweet rate (Yang & Counts, 2010).

Research Questions

Previous research (Hagar & Haythornwaite, 2005; Koop & Jansen, 2009; Li & Rao, 2010; Liu et al., 2008; Palen et al., 2009; Palen & Liu, 2007; Qu et al., 2009; Qu et al., 2011; Schneider & Foot, 2002; Shklovski et al., 2008; Starbird & Palen, 2010; Sunstein, 2008; Torrey et al. 2007; Vieweg et al., 2008; Tumasjan & Sprenger et al., 2010; Vieweg et al., 2010; Woodly, 2008) has provided evidence that SNSs have been widely applied to public affairs such as mass emergency events, and political elections in many aspects such as information classification schemes, information quality, and information spreading path. However, SNSs' applications in political corruption issues are relatively unknown. With the

rapid development of ICTs, microblogging systems are arousing much more interest than other “traditional” network sites such as Facebook and MySpace, and non-Western microblogging systems are also under scholars’ examination. However, scholars have not studied the field of applications of non-Western microblogging systems in anti-political corruption activity, let alone the anti-political corruption activity in China.

For the reasons above, this content analysis explored the roles played by Chinese microblogging systems in response to political corruption issues, to explore how the power of microblogging was harnessed to facilitate the process of anti-corruption activity, and to supplement existing works with an exploration of a non-Western socio-cultural system: how Chinese Internet users used microblogging in political corruption issues. In order to fulfill the research objective, research questions were asked. First, this research wanted to explore what kind of messages were posted during political corruption responses. In addition, this study tested if the category classification of messages regarding a political corruption incident was contingent with Qu’s classification of messages responding to a natural disaster. The first question is:

RQ1: Do the messages regarding a political corruption incident reflect the classification of messages responding to a natural disaster in Qu’s (2011) study?

Previous studies (Qu et al., 2009; Qu et al., 2011) have demonstrated shifting attention and activities within online communities regarding a certain case. However, the trends of attention and activities towards political corruption scandal are relatively unknown. Thus, the second research question is:

RQ2: Are there different posting behaviors in respect to different types of messages during different time periods after a breakout of a political corruption issue?

The behavior of re-posting institutes the information dynamics within microblogging systems. This study concerns what kind of messages is more likely to be reposted and what are the characteristics of these messages. Thus, the third question is:

How does political-corruption-related information spread in a microblogging system?

Researchers have found that action-related and information messages such as situation update messages enjoy a higher possibility to be re-posted than opinion-related and emotion-related categories in crisis informatics within the domain of natural disasters (Qu et al., 2011). In addition, the presence of URLs (Zarrella, 2009; Suh, Hong, Pirolli & Chi, 2010) and verification (Zhao, 2013) may increase the probability of being re-posted.

The main characteristics of natural disasters are unpredictability, unfamiliarity, speed, urgency, uncertainty, and threat (Hoda, 2010). A political corruption scandal combines elements of politics with natural disasters. A political corruption scandal breakouts suddenly. Immediately after the breakout, information is uncertain but spreading fast with the use of social media tools.

Combining previous studies (Pirolli & Chi, 2010; Qu, Huang, Zhang & Zhang, 2011; Suh, Hong, Pirolli & Chi, 2010; Zarrella, 2009; Zhao, 2013) and the common characteristics of political corruption issues shared with natural disasters, this study tested the following hypotheses:

H1a: Information messages are more likely to be re-posted than other messages.

H1b: Messages containing URLs, pictures, and videos are more likely to be re-posted than other messages.

H1c: Messages posted by verified users are more likely to be re-posted than other messages.

Chapter 3

Methods

To understand how Sina Weibo users reacted to a political corruption incident, this study adopted a content analysis of the content of microblog messages, distributions of categories over time, and the information spreading process. To address the first research question, this study conducted an analysis of the content microblog messages using the classification scheme developed. To address the second research question, this study examined trends of different types of messages and the shifting attention of Sina Weibo users. To test three hypotheses, chi-square tests were conducted.

Sample and Procedure

This thesis examined collected 1,861 messages related to the Lei Zhengfu affair on Sina Weibo during a 63-hour period after the sex screenshots were posted on Sina Weibo. Specifically, the 63-hour window started from 20:00 November 20, 2012, and ended at 10:59 November 23, 2012. This period was chosen because it covered the whole process from when the sex screenshots were initially released on Sina Weibo to the final decision of removing Lei from his position.

The search engine of Sina Weibo was used to obtain publicly available messages containing case-related search terms. The data was collected by submitting one query, “雷政富,” (“Lei Zhengfu”) to the Sina Weibo search interface and extracting posts and re-posts from the search-result pages. Due to the limited capabilities of the Sina Weibo search engine, only the latest 50 pages of messages can be displayed. In order to possibly gain as many messages as possible within the 63-hour time period, message collection was operated by a 1-

hour time period. In total, 9,309 “Lei Zhengfu” related messages were retrieved from this query. This is only a subset of all the “Lei Zhengfu” related messages; other relevant messages that do not contain the key words listed above might have been missed. In order to enhance the operability of this study, this study systematically selected the first of every five messages for analysis, resulting in a total of 1,861 messages.

Each message collected was analyzed and some basic information was recorded, including the author’s name, message content, and the publication date and time. Whether this user is verified, and whether the message included multimedia contents were also recorded.

Reliability Measurement

The first coder coded 1,861 messages based on the final classification scheme. In order to verify the validity of coding, 207 random messages were double-coded by the second coder. The intercoder reliability between the two coders was 98.07 percent, and the Cohen’s kappa is 0.96. The agreement was 100 percent on information-related messages, 90.48 percent on opinion-related messages, 85.71 percent on emotion-related messages, and 86.36 percent on snark-related messages.

Content Analysis

Content analysis was employed to examine the dynamic informatics within the responses to Lei’s affair. Content analysis has been defined as a technique to identify characteristics of materials and systematically extract desired information from them (Hsieh & Shannon, 2005; Smith, 2000). This method of analysis was selected to scrutinize the large data set systematically, categorize the sampled messages reasonably, answer research questions, and test the hypothesis.

Coding Procedures

Developing Classification Scheme. Qu's (2011) classification system was employed in examining the message content. It has been successfully used as a coding system for the analysis of Sina Weibo messages responding to the 2010 Yushu Earthquake in China. This taxonomy was designed to assess the proportion of messages responding to natural disasters that fell into six categories: informational messages, opinion-related messages, emotion-related messages, action-related messages, microblogging system related messages, and off-topic messages (Qu et al., 2011). The category "action-related messages" was deleted from the coding system as this refers to messages requesting help, looking for missing people, and proposing relief action (Qu et al., 2011), which were not fit with the particular characteristics of Lei's affair. In addition, the category of "microblogging system related messages" was combined with "opinion-related messages" as it refers to messages "suggesting how Sina Weibo should be used in disaster response" (Qu et al., 2011).

This study also borrowed ideas of classification from the sampled messages. There are many "snarky" messages posted on Sina Weibo. A category named snark-related messages was added to the classification scheme. Opinions are something that one believes in based on that which may not be absolutely certain (Imani & Moghadam, 2013); however, according to Merriam-Webster, emotion refers to strong feelings, which is directed toward specific objects. These messages went beyond the emotion of a message that says, "I am outraged" to personally insult the subject of the news. But it does not seem to have the same level of fact-based opinion as a message that refers to the corruption of government officials. Snark refers to abusive and sarcastic speech or writing (Weeks, 2013). In recent years, people are getting more and more cynical. Sarcasm has overswept the popular culture into Snark Ages. Snark came from people's alienation from government, jobs, and extended families, which were traditional bondage. Besides people's dissatisfaction about institutions, less

expression freedom is also a reason that led people into an epoch of antisentimentality (Weeks, 2013). People feel safe when hiding behind aloofness and cynicism (Weeks, 2013). People use snark to separate themselves from the mainstream as well as recognize partners of the same contemporary group (Telofski, 2010).

For the social function of snark, Lawrence Dorfman (2009) thought snark could be good if it is defined as a witty combination of sarcasm and amusement. In Lei's affair, the example for this could be one extracted from 1,861 sample messages: "Government officials can learn an important lesson from Lei's affair: that you must arrange some guy in the Ministry of Public Security to protect you from being eavesdropping and secret pictures.¹" This kind of posts mocked Lei Zhengfu or government in an indirect way and is filled with the sense of a cold joke, but did not reach the level of sharing opinions referring to government corruption. However, when snark is defined as a teasing form of insult to attack individuals (Denby, 2009), it is perceived as sophomoric. For example, "Look at his face! Didn't it remind you of the squash in *Plants vs. Zombies*?" This kind of post went beyond messages simply expressing emotions such as "I am grossed out by his appearance!" The difference between snark-related messages and an amusement messages is snark-related messages were the ones that amused people and encouraged them to post amusement messages.

Within Qu's classification scheme, Qu et al. (2011) proposed six subcategories. In addition, Ekman (1992) stated six categories of emotion: anger, disgust, fear, happiness, sadness, and surprise. The researcher considered the applicability of those coding categories, adding necessary categories, removing needless categories, revising category definitions, and determine examples for each categories (Table 1). These subcategories were able to help set messages in proper categories.

¹ Messages are extracted from the sampled messages and are presented without correction.

Table 1

Microblog Messages Classification

| Category | Description |
|--|---|
| <i>Information-Related Messages (Qu et al., 2011)</i> | |
| Situation Update | Providing information about the progress of Lei's affair and the influence upon society |
| Information Aggregation | Simply re-posting information or integrating information from other community members to form an information database of Lei's affair |
| Querying and Seeking | Asking for information about Lei's affair from other community members |
| General Information Related | Providing information about Lei as well as his families, as well as the influence the scandal caused in society, and the information about general political environment in China |
| <i>Opinion-Related (Qu et al., 2011)</i> | |
| Estimating | Estimating the current condition of Lei, the truth of the scandal, and the result of this affair |
| Criticizing | Criticizing individuals, organizations, websites, or government |
| Praising | Praising Ji's bravery, general people's participation, and government's efficiency in responding |
| Suggesting | Suggesting Lei answer queries, providing suggestions to the government, and reflecting on how Sina Weibo should be used in responding to political corruption issue |
| Questioning | Questioning the purpose of Ji's real-name report |
| Others | Other opinions without explicit praise or criticism |
| <i>Emotion-Related (Qu et al., 2011)</i> | |
| Expressing | Expressing personal feelings such as anger, disgust, fear, amusement, sadness and surprise |
| <i>Snark-related Messages</i> | |
| Witty Expressing | Expressing in the form of combination of sarcasm or cynicism |
| Insulting | Simply insulting the individual or the government |

Off-Topic (Qu et al., 2009)

Advertisement

Advertising commercial products

Others

Messages irrelevant to Lei's affair

Information-related messages (Qu et al. 2011) were divided into 4 subcategories.

- **Situation Update.** This subcategory contains messages regarding the progress of Lei's affair posted by primary sources. These messages were authored by three groups of sources: Ji, the investigative journalist who first released Lei's screenshots on Sina Weibo; the Chongqing Municipal People's Government Information Office; and other Chinese media. At 14:09, on Nov. 21, 2012, Ji posted a message that read, "Lei Zhengfu, the party secretary of Chongqing's Beibei District commanded Criminal Investigation Branch to investigate everyone who know about the explicit pictures." At 11:06, on Nov. 23, 2012, the Chongqing Municipal People's Government Information Office posted a message: "According to the investigation of Commission for Discipline Inspection, the male shown in the video was Lei Zhengfu." Although there were only a few messages in this subcategory, primary news accounts had a great effect on Sina Weibo users. Online users were able to learn the current state of the scandal and how the Chinese government was responding to it.
- **Information Aggregation.** This subcategory accounts for a large proportion, 48.04 percent of political corruption response. Re-posted messages of primary sources and secondary sources made up this sub-category. In addition, most messages from this subcategory provided multimedia information, such as pictures, videos, and URLs. Compared with other traditional media, Weibo is a particularly powerful platform for gathering and integrating information for users.
- **Querying and Seeking.** This subcategory contains messages in which users asked for more information concerning Lei's affair and also the government's reaction and

solution. “What’s going on with Lei Zhengfu?” is an example of a user looking for further information about the situation.

- **General Information Related.** In contrast to the previous three subcategories, this subcategory contains messages describing Lei’s employment history, his family’s background, the influence the scandal has caused in society, and the general political environment in China. For instance, a Sina Weibo user Shi Yanpeng posted a message saying, “Lei Zhengfu made his brother Lei Zhengkui undertake an important construction program.”

As a platform of new media, Sina Weibo plays an important role in opinion expression and exchange of ideas. Opinion-related messages (Qu et al., 2011) were divided into five subcategories.

- **Estimating.** Sina Weibo users voiced their opinion about the truth of this scandal. “I do not believe this scandal is false, they are exactly the same!” one user wrote. Another commented, “The man in that video must be Lei Zhengfu himself. How does it possible to photoshop a video?” One user also estimated the current condition of Lei by saying “Lei must be nervous as a cat on hot bricks.”
- **Criticizing.** In this subcategory, most messages criticized Lei’s wrongdoings. One comment said, “It is wrong to do such inelegant thing!” They also criticized the political environment in China, “Something is doomed in this society. Rich people can enjoy the profits of social security, even the dead people can. However, poor people just cannot. What society are we living in?” In addition, the strict censorship by government was a target: “How could you just delete my message like that? This kind of censorship is not good for creating a civil society.” This study also found an interesting message criticizing the performance of a Chinese searching engine, “I want some information about Lei Zhengfu, why you give me something like

traditional wisdom? Is it really worth sacrificing reputation for such official as a commercial website?”

- **Praising.** There were messages praising Ji’s bravery during the situation and users’ engagement in anti-corruption activities. For example: “Mr. Ji, you are an honorable man. You never forget your initial dream of being a journalist! I will support you forever!”
- **Suggesting.** Suggestions were provided by Sina Weibo users regarding how the Chinese government should handle this kind of political corruption.
- **Questioning.** Some users also questioned Ji’s motive - whether he did this to be famous or simply to uphold justice. For example, “Ji did all of this just because he wants to be famous!”

Sina Weibo users used this platform to express personal feelings. These messages showed surprise about Lei’s scandal, expressed anger and disgust towards Lei’s wrongdoing, declared sadness about the current political situation in China, and voiced amusement caused by jokes, doggerels, and cartoons that made fun of Lei.

In the category of snark-related messages, some of them feature sarcasm and cynicism wittily, such as “Lei Zhengfu! What a wonderful name! Zhen means politician and Fu mean rich. If you want to be rich, all you need to do is become a politician!” Others simply insult an individual or the government, such as “Oh my God! He can play ghost without any makeup!”

There were also messages irrelevant to Lei’s affair, such as advertisements.

Distributions of Categories over Time. To analyze the trends of messages over time, this study analyzed the overall trend first. The researcher counted the number of messages and messages with re-posts in each hour and drew a line chart. Further, the 63-hour time period was divided into two parts: the first 31.5 hours and the last 31.5 hours. The number of

messages in each category during these two time periods was counted and the percentages were calculated. A chi-square test was done to examine if there was any difference between these two distributions.

Information Spreading Analysis. Vieweg, Hughes, Starbird and Palen (2010) considered re-tweet convention as an informal recommendation system to pass on information which Twitter users considered as important for other people to know. The information dissemination process was analyzed from three perspectives: the content of messages, the containing of multimedia, and verification. To examine what content type of messages was more likely to be re-posted, the number of messages that had been re-posted and messages that had not been re-posted in each major category except the category of “off-topic messages” were counted and the percentages were calculated. A chi-square test was done to explore if there was any difference between these two distributions.

To examine whether the containing of multimedia affected the re-post rate, the variable “messages with multimedia” was defined as messages containing URLs, pictures, and videos. The number of messages that have been re-posted and messages that have not been re-posted in the categories of “messages with multimedia” and “messages without multimedia” were counted and the percentages were calculated. A chi-square test was conducted to examine if there is any preference between these two categories.

The variable “verified users” referred to users who have been identified by the verification system of Sina Weibo. The number of messages that have been re-posted and messages that have not been re-posted in the categories of “messages posted by verified users” and “messages posted by non-verified users” were counted and the percentages were calculated. A chi-square test was conducted to examine the difference between these two distributions.

Chapter 4

Results

This study examines different categories of messages related to the Lei Zhengfu political corruption issue, as well as the attention shift during different periods of the public response, and the overall information spreading process. The data results include the analysis of the three research questions and three hypotheses presented, and a conclusive summary of the findings.

Analysis of Message Content

A total of 1,861 recorded microblog messages were divided into five categories according to the previously described category classifications (Figure 1.) Each major category was divided into several subcategories (Figure 2, Figure 3, Figure 4, Figure 5.) There were 1,070 (57.50 percent) information-related messages, 325 (17.46 percent) opinion-related messages, 175 (9.40 percent) emotion-related messages, 263 (14.13 percent) snark-related messages, and 28 (1.50 percent) off-topic messages.

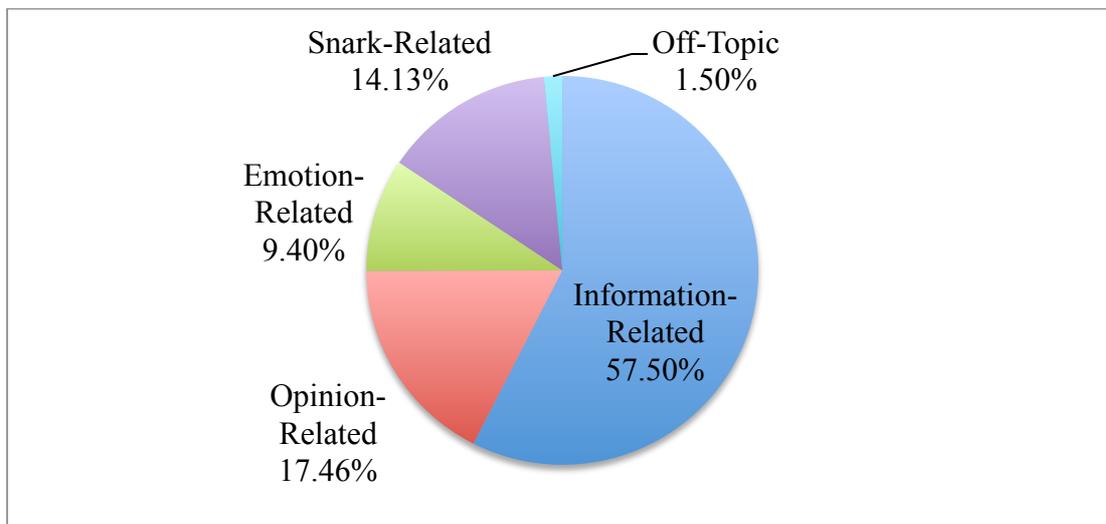


Figure 1. Category Distribution of Sampled Microblog Messages

Figure 2 shows subcategory distribution of information-related messages. In this category, there were 19 (1.78 percent) situation update messages, 894 (83.55 percent) information aggregation messages, 79 (7.38 percent) querying and seeking messages, and 78 (7.29 percent) general information related messages.

Information aggregation messages posted by general users account for a large majority of the user comments compared to other three categories, particularly the situation update messages that came from the primary sources. This is because compared with general users, accounts of primary sources such as journalists, newspapers, and government agencies only account for a much smaller proportion.

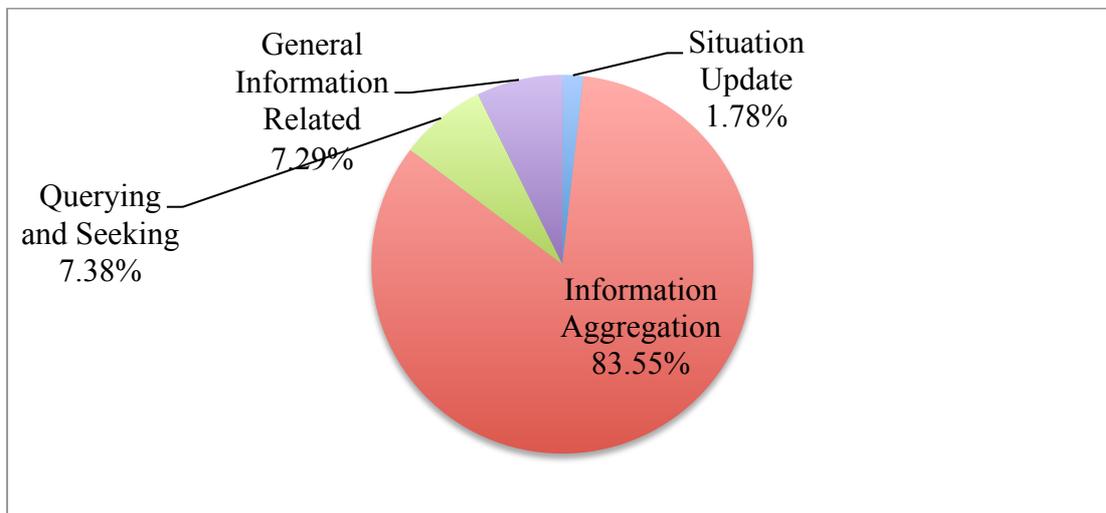


Figure 2. Subcategory Distribution of Information-Related Messages

Figure 3 shows the subcategory distribution of opinion-related messages. In this category, there were 105 (32.31 percent) estimating messages, 73 (22.46 percent) criticizing messages, 25 (7.69 percent) praising messages, 70 (21.54 percent) suggesting messages, 1 (0.31 percent) questioning message, and 51 (15.69 percent) other opinion-related messages.

The subcategories of Estimating, Criticizing, and Suggesting make up the majority of messages within the opinion-related category compared with Praising and Questioning. This means Sina Weibo users paid more attention to the scandal's truth and this very political corruption issue itself rather than the efforts made by individuals and government agencies.

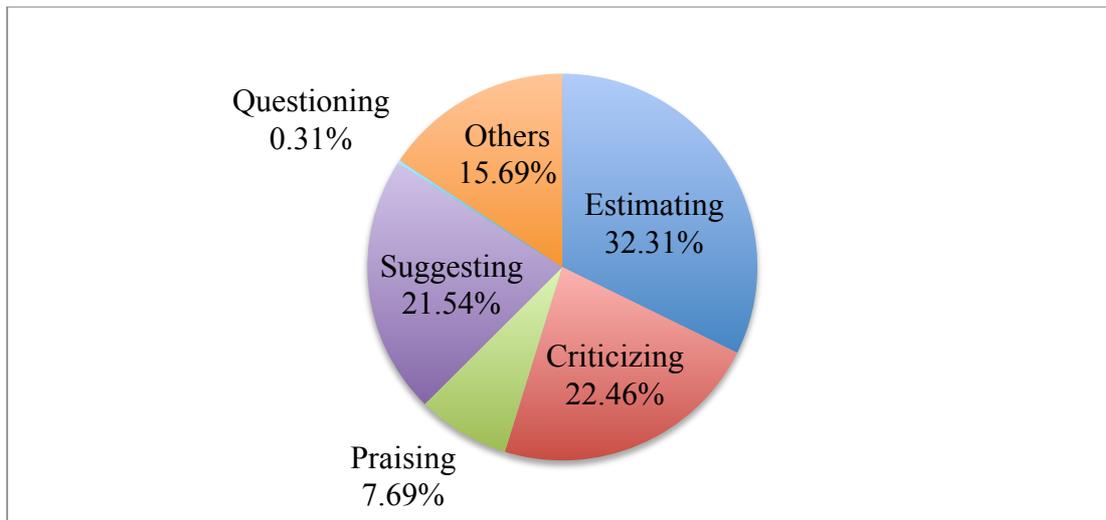


Figure 3. Subcategory Distribution of Opinion-Related Messages

Figure 4 shows the subcategory distribution of emotion-related messages. There were 43 (24.57 percent) messages expressing anger, 29 (16.57 percent) messages expressing disgust, 2 (1.14 percent) messages expressing fear, 47 (26.86 percent) messages expressing amusement, 26 (14.86 percent) messages showing sadness, and 28 (16.00 percent) messages showing surprise.

Messages expressing amusement and anger rank the highest in this category. Users were surprised, disgusted and angry with the political corruption issue. However, people voiced their amusement as well. Political satire, which was defined as snark-related messages, played a part here. Jokes, doggerels, and cartoons were directed at Lei, which in turn, caused amusement among the online users.



Figure 4. Subcategory Distribution of Emotion-Related Messages

Figure 5 shows the distribution of snark-related messages. There were 173 (65.78 percent) witty expressing messages and 90 (34.22 percent) insulting messages. Under the strict censorship in China, messages showing cynicism is one way to indirectly express opinions without being deleted by the censors of Sina Weibo.

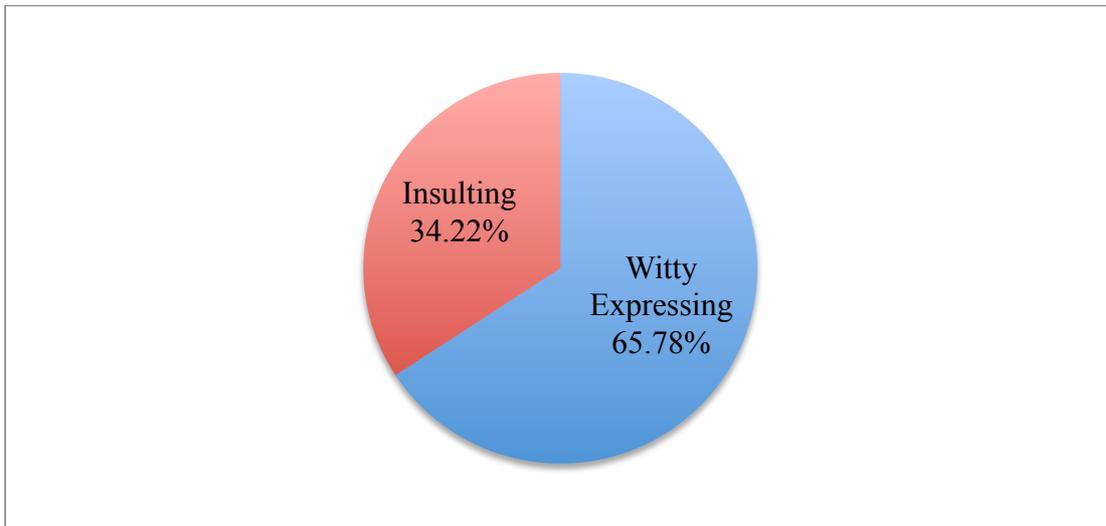


Figure 5. Subcategory Distribution of Snark-Related Messages

In summary, this classification scheme guides the first research question: Do the messages regarding a political corruption incident reflect the classification of messages responding to a natural disaster in Qu's (2009) study? These four major categories include information-related, opinion-related, emotion-related, and snark-related messages, which is

consistent with Qu’s (2009) findings. The data results reflect four major functions of Sina Weibo during the political scandal: (1) information seeking, gathering, and spreading; (2) opinion exchange; (3) release of emotion; and (4) sarcasm and amusement.

Distributions of Categories over Time

An analysis was conducted to evaluate the relationship between the different types of messages and time periods. This analysis reflected the attention shift during a 63-hour period following the emergence of the Lei Zhengfu affair on Sina Weibo.

Overall Trend. This study analyzed 1,861 Lei Zhengfu-related microblog messages collected from a 63-hour period after the news of Lei’s affair became public on Sina Weibo. The number of messages posted each hour as well as the number of messages with re-posts each hour were counted (Table 2).

Table 2

Number of All Messages and Messages with Re-posts Each Hour

| Date and Time | All Messages | Messages with Re-posts |
|----------------------|---------------------|-------------------------------|
| 11-20-2012 20:00 | 1 | 0 |
| 11-20-2012 21:00 | 1 | 0 |
| 11-20-2012 22:00 | 2 | 1 |
| 11-20-2012 23:00 | 4 | 3 |
| 11-21-2012 00:00 | 3 | 0 |
| 11-21-2012 01:00 | 2 | 0 |
| 11-21-2012 02:00 | 1 | 0 |
| 11-21-2012 03:00 | 0 | 0 |
| 11-21-2012 04:00 | 1 | 0 |
| 11-21-2012 05:00 | 0 | 0 |
| 11-21-2012 06:00 | 1 | 1 |
| 11-21-2012 07:00 | 4 | 1 |
| 11-21-2012 08:00 | 8 | 5 |
| 11-21-2012 09:00 | 9 | 3 |
| 11-21-2012 10:00 | 7 | 4 |
| 11-21-2012 11:00 | 5 | 0 |
| 11-21-2012 12:00 | 8 | 0 |
| 11-21-2012 13:00 | 7 | 0 |
| 11-21-2012 14:00 | 16 | 5 |
| 11-21-2012 15:00 | 22 | 13 |
| 11-21-2012 16:00 | 28 | 11 |

| | | |
|------------------|-----|----|
| 11-21-2012 17:00 | 57 | 39 |
| 11-21-2012 18:00 | 32 | 23 |
| 11-21-2012 19:00 | 91 | 70 |
| 11-21-2012 20:00 | 43 | 33 |
| 11-21-2012 21:00 | 31 | 20 |
| 11-21-2012 22:00 | 27 | 21 |
| 11-21-2012 23:00 | 27 | 17 |
| 11-22-2012 00:00 | 19 | 13 |
| 11-22-2012 01:00 | 9 | 6 |
| 11-22-2012 02:00 | 6 | 2 |
| 11-22-2012 03:00 | 2 | 0 |
| 11-22-2012 04:00 | 2 | 2 |
| 11-22-2012 05:00 | 3 | 2 |
| 11-22-2012 06:00 | 6 | 4 |
| 11-22-2012 07:00 | 13 | 7 |
| 11-22-2012 08:00 | 40 | 30 |
| 11-22-2012 09:00 | 51 | 38 |
| 11-22-2012 10:00 | 54 | 38 |
| 11-22-2012 11:00 | 39 | 16 |
| 11-22-2012 12:00 | 31 | 15 |
| 11-22-2012 13:00 | 35 | 24 |
| 11-22-2012 14:00 | 37 | 20 |
| 11-22-2012 15:00 | 46 | 9 |
| 11-22-2012 16:00 | 66 | 22 |
| 11-22-2012 17:00 | 49 | 10 |
| 11-22-2012 18:00 | 44 | 11 |
| 11-22-2012 19:00 | 77 | 30 |
| 11-22-2012 20:00 | 95 | 41 |
| 11-22-2012 21:00 | 138 | 81 |
| 11-22-2012 22:00 | 95 | 49 |
| 11-22-2012 23:00 | 60 | 33 |
| 11-23-2012 00:00 | 43 | 27 |
| 11-23-2012 01:00 | 17 | 11 |
| 11-23-2012 02:00 | 10 | 8 |
| 11-23-2012 03:00 | 10 | 6 |
| 11-23-2012 04:00 | 8 | 4 |
| 11-23-2012 05:00 | 6 | 3 |
| 11-23-2012 06:00 | 12 | 4 |
| 11-23-2012 07:00 | 29 | 15 |
| 11-23-2012 08:00 | 70 | 30 |
| 11-23-2012 09:00 | 103 | 35 |
| 11-23-2012 10:00 | 98 | 38 |

Figure 6 shows the overall trend of all messages (blue line) and re-posted messages (red line).

It can be seen from Figure 6 that messages peaked at 19:00, on Nov. 21, 2012. At this time most Sina Weibo users would be finished with their daytime work and would be at home relaxing. As it became later, however, the message volume gradually dropped. Message numbers peaked again around 21:00 on Nov. 21. Volume on Nov. 22 is much larger than the previous day because of the increasing awareness of Lei's affair among Sina Weibo users.

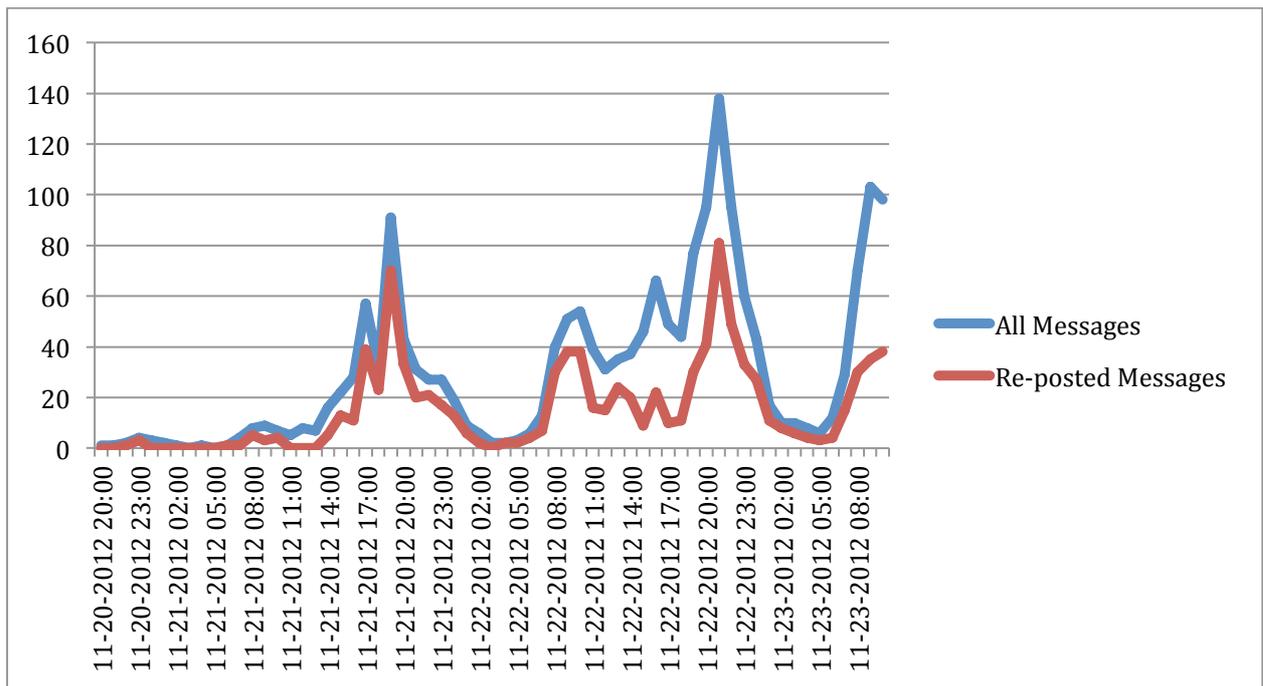


Figure 6. Trends of Lei Zhengfu Affair-Related Microblog Messages

Among 1,861 sampled microblog messages, 954 are re-posted messages, which account for 51.26 percent of all messages. From Figure 6, it is easy to see that distributions of all microblog messages and re-posted messages followed a similar path.

Trends of Microblog Messages in Different Categories. Research question two states:

Q2: Are there different posting behaviors in respect to different type of messages during different time periods after a breakout of a political corruption issue?

To answer this question, trends of different message categories over time were analyzed. Figure 7 shows the trends of four major categories: information-related messages, opinion-related messages, emotion-related messages, and snark-related messages.

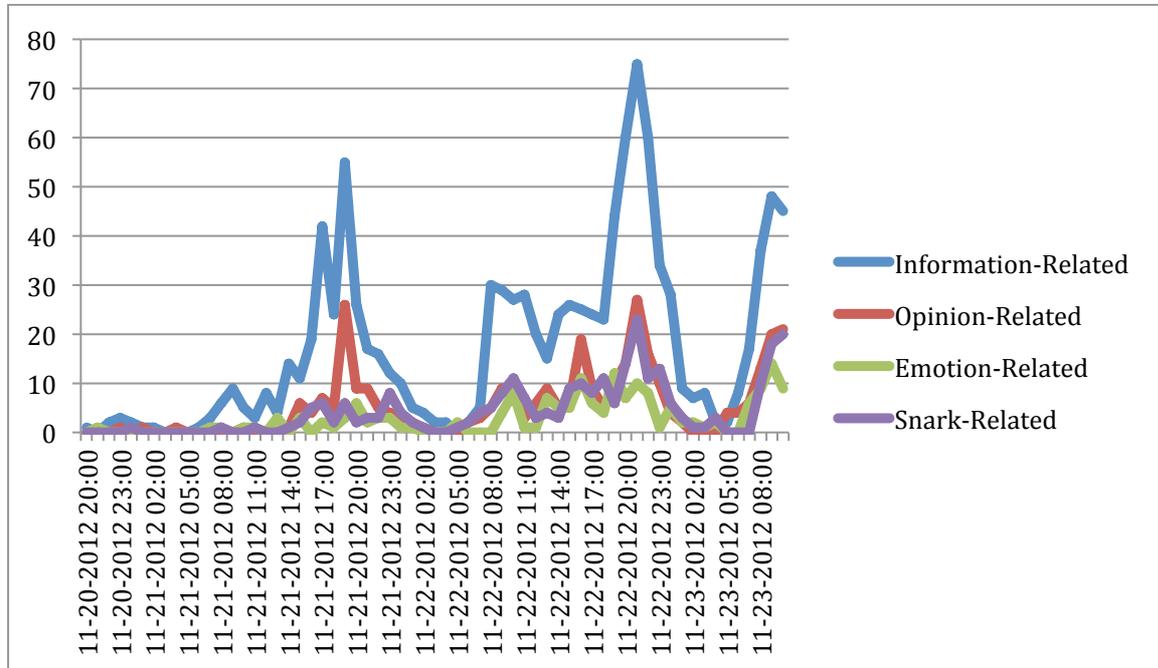


Figure 7. Trends of Four Major Categories

Observed from Figure 7, trends of messages in each category followed a similar routine: they all reached the peak between 17:00-23:00 during the first two days after the news of the scandal was released on Sina Weibo. On Nov. 23, messages reached a peak between 9:00-10:00, when it is assumed that users are beginning their day. Information-related messages peaked first, declined as expected, and then peaked much higher than the first day. Opinion-related messages were second to information-related messages and occurred similarly. Emotion-related messages developed gradually during the 63-hour time period. Lastly, snark-related messages grew over the time period.

To further test the trends change, this study divided messages into two time periods: the first 31.5 hours and the last 31.5 hours. The results are shown in Table 3.

Table 3

The Number and Percentage of Messages during Early and Late Periods

| | Information -Related | Opinion- Related | Emotion- Related | Snark- Related | Total |
|---|---------------------------------|-----------------------------|-----------------------------|---------------------------|--------------|
| Early 11/20/2012 20:00~11/22/2012 3:29 | 305 64.76% | 85 18.05% | 33 7.01% | 48 10.19% | 471 |
| Late 11/22/2012 3:31~11/23/2012 10:00 | 765 56.17% | 240 17.62% | 142 10.43% | 215 15.79% | 1,362 |
| Total | 1,070 | 325 | 175 | 263 | |
| | | | | $\chi^2 = 16.379$ | df = 3 p<.01 |

Table 3 shows that the ranking of messages for the four categories remain the same: information-related messages ranked first, opinion-related messages ranked a distant second, snark-related messages ranked third, followed by emotion-related messages. This study found an 8.59 percentage point decrease in the proportion of information-related messages, while the proportion of snark-related messages increased by 5.60 percentage points. The proportion of emotion-related messages increased from 7.01 percent to 10.43 percent. The proportion of opinion-related messages slightly decreased. A chi-square test was done on the distributions of these two message classifications in order to determine any differences. The result of the chi-square test was $\chi^2 = 16.379$, $p < .01$. The results showed that the distributions between the first time period and the second are significantly different.

The category trends reveals changes in user attentions and activities during the 63-hour time period of Lei's affair. After the breakout of Lei's affair, the biggest proportion of political corruption related messages were information-related messages. Sina Weibo users were eager to know what was happening about Lei Zhengfu. They queried, sought information, linked to external information, and ultimately spread information to those who

had not been informed. More and more Sina Weibo users became aware of the Lei Zhengfu situation. In addition, there was little new information released by the Chinese government to the general public. Therefore, the proportion of information-related messages decreased over time. Meanwhile, the expression of emotions increased. Trends of emotion-related messages are shown in Table 4.

Table 4

Number of Six Subcategories within Emotion-Related Messages

| Subcategory | Anger | Disgust | Fear | Amusement | Sadness | Surprise |
|--|--------------|----------------|-------------|------------------|----------------|-----------------|
| Number in the Early Time Period | 16 | 6 | 0 | 2 | 3 | 6 |
| Number in the Late Time Period | 27 | 23 | 2 | 45 | 23 | 22 |

This study found an interesting phenomenon here. Messages expressing amusement increased the most, from 2 to 45. Postman (2006) once said, the boundary between show business and others are no longer distinct. People are in an age of amusing themselves to death (Postman, 2006). As Lei’s affair became more and more publicized, jokes, doggerels, and cartoons making fun of Lei Zhengfu emerged, which are defined as snark-related information. More and more Sina Weibo users were amused by these kinds of entertainment and replied by expressing amusement.

For opinion-related messages, the proportion is less linear. The expression and exchange of opinions remain an important part within political corruption responses.

Information Spreading Analysis

H1a states that: Information messages are more likely to be re-posted than other messages. In order to test this hypothesis, this study analyzed the 1,833 sampled messages in the four major categories. Results are shown in Table 5.

Table 5

The Number and Percentage of Messages in Each Category

| | Information-Related | Opinion-Related | Emotion-Related | Snark-Related | Total |
|----------------------------------|----------------------------|------------------------|------------------------|----------------------|--------------|
| Have been Re-posted | 286 55.86% | 91 17.77% | 39 7.62% | 96 18.75% | 512 |
| Have Not been Re-posted | 784 59.35% | 234 17.71% | 136 10.30% | 167 12.64% | 1,321 |
| Total | 1,070 26.73% | 325 28.00% | 175 22.29% | 263 36.50% | 1,833 |
| $\chi^2 = 13.137$ df = 3 p < .01 | | | | | |

A chi-square test was completed on the sampled data. The result shows a significant difference between the category distribution of messages that have been re-posted and the category distribution of messages that have not been re-posted. The proportion of information-related messages that have been re-posted is lower than those that have not been re-posted by 3.49 percentage points. While, the proportion of snark-related messages that have been re-posted is 6.11 percentage points higher than those that have not been re-posted. Because of the particular characteristic of Lei's affair, the Chinese government rarely released new information to the general public. As users were already aware the situation, they did not need to re-post the information. However, snark-related messages were able to amuse people easily and people liked to be amused. Thus, the re-post rate of snark-related messages is higher than non re-post rate. The re-post rate and non re-post rate of opinion-related message is almost the same. Emotion-related messages enjoyed a higher non re-post rate than re-post rate.

In 1,833 messages except off-topic messages, the snark-related messages have the highest re-post rate-36.50 percent - in the four major categories, while information-related messages only rank in third place, accounting for 26.73 percent. Opinion-related and

emotion-related messages rank the second and fourth, respectively. Thus, H1a was not supported.

H1b states that: Messages containing URLs, pictures, and videos are more likely to be re-posted than other messages. 1,861 messages were analyzed. The results are shown in Table 6.

Table 6

Number and Percentage of Messages with/ without Multimedia

| | With Multimedia | Without Multimedia | Total |
|--------------------------------|------------------------|---------------------------|--------------|
| Have been Re-posted | 462 89.36% | 55 10.64% | 517 |
| Not have been Re-posted | 1,182 87.95% | 162 12.05% | 1,344 |
| Total | 1,644 28.10% | 217 25.35% | 1,861 |
| $\chi^2 = 0.726$ df = 1 p>.05 | | | |

Table 6 shows that 1,644 of the 1,861 sampled messages contain multimedia contents. Among them, 462 messages have been re-posted. Meanwhile, there are 217 messages without multimedia contents, among which 55 messages have been re-posted. A chi-square test was performed on the sampled data to compare the category distributions of messages that have been re-posted and those that have not been re-posted. The chi-square test failed to demonstrate a significant difference. The re-post rate and non re-post rate of messages with multimedia are almost the same. This means that users do not have a real preference for re-posting messages, even if they contain multimedia content. The H1b is not supported.

This could be explained by the particular characteristic of Lei’s affair. The pictures and videos of a political corruption scandal were released at an early time. Few new visual images were released by the Chinese government, resulting in the decrease of re-post rate of messages with multimedia content. However, during responses of natural disaster, new visual

images about casualties were released and updated timely, which increased the re-post rate of messages with multimedia contents.

H1c states that: Messages posted by verified users are more likely to be re-posted than other messages. A total of 1,861 sampled messages were analyzed. The result is shown in the following Table 7.

Table 7

Number and Percentage of Messages Posted by Verified users/Non-verified Users

| | Posted by Verified Users | Posted by Non-Verified Users | Total |
|------------------------------------|---------------------------------|-------------------------------------|--------------|
| Have been Re-posted | 121 23.40% | 396 76.60% | 517 |
| Not have been Re-posted | 68 5.06% | 1,276 94.94% | 1,344 |
| Total | 189 64.02% | 1,672 23.68% | 1,861 |
| $\chi^2 = 137.709$ df = 1 p < .001 | | | |

A chi-square test was performed on the sampled data and showed that category distribution of messages that have been re-posted and category distribution of those that have not been re-posted are significantly different. This indicates a preference when users choose whose messages they intended to re-post. The re-post rate of messages posted by verified users is 18.34 percentage points higher than the non re-post rate. Thus, the H1c is supported.

In summary, users do have different re-posting behaviors in respect to different types of messages during different time periods after the breakout of a political corruption issue. The proportion of Information-related messages decreased. However, the proportion of snark-related messages and emotion-related messages increased. Snark-related, messages posted by verified Sina Weibo users enjoy a higher re-post rate than other messages.

However, the inclusion of multimedia contents, such as URLs, pictures, and videos, does not have much effect on the re-post rate.

Chapter 5

Discussion

This study analyzed three aspects of information dynamics for one of the most famous Chinese microblogging systems, Sina Weibo, in response to the Lei Zhengfu political corruption scandal. The two research questions asked: (1) Do the messages regarding a political corruption incident reflect the classification of messages responding to a natural disaster in Qu's (2011) study? (2) Are there different posting behaviors in respect to different types of messages during different time periods after a breakout of a political corruption issue?

The findings of this study stated that the messages regarding a political incident partially reflect the classification in Qu's (2011) study. Information-related messages, opinion-related messages, and emotion-related messages were identified, which were consistent with Qu's findings. However, action-related messages, which refer to messages requesting help, looking for missing people, and proposing relief action, were not found in the crisis informatics of Lei's affair. During responses of natural disasters like Yushu Earthquake, this kind of messages is usually posted because of the casualties caused by natural disasters. On the contrast, action-related messages will be missing during the response of a political disaster like Lei's political corruption scandal, because there is not much action that could be taken by the general public.

Besides the three categories that were proposed by Qu et al. (2011), a new category was added to the classification scheme: snark-related messages. Two subcategories were proposed including messages wittily expressing sarcasm and amusement and messages simply insulting individuals. Of the 1,861 sampled messages analyzed, 263 were snark-

related messages, including 173 witty expressing messages and 90 insulting messages. Without sensitive words, messages avoid being deleted by censors in Sina Corporation. Thus, that kind of messages was able to reach more audiences. In the particular political environment in China, being snarky could be a good way to gain more freedom of speech.

These major categories reveal four roles the microblogging system played during Lei's affair: information searching, collecting, integrating and disseminating; opinion exchanging; and sarcasm and amusement.

The results of this study demonstrated different posting behaviors in respect to different types of messages during different time periods after a breakout of a political corruption issue. The four major message categories showed different developing trends during the political corruption response period. Vieweg et al. (2010) have demonstrated that microblogging systems play an important role in providing related information during disaster responses. This study demonstrated that not only during natural disaster responses, but also throughout a political corruption situation, microblogging systems serve as databases for information aggregation and dissemination.

During the final 31.5-hour response period, information-related messages decreased a few percentage points compared with the previous 31.5-hour time period. With more and more people knowing what was going on with Lei's affair, the need to seek information, and the need to simply re-post and integrate information decreased. Instead, the need to express emotions, opinions, sarcasm and amusement increased. In contrast to previous studies (Qu et al., 2009 & Qu et al., 2011), this study defined situation updates as messages posted only by primary sources. Re-posted messages of situation updates are classified as information aggregation. This study found an overwhelming number of information aggregation messages, which are re-posts of situation update messages. This phenomenon makes a reasonable

filtering mechanism necessary for Weibo users to distinguish authentic primary sources from other less credible user accounts.

The proportion of opinion-related messages did not fluctuate much. Opinion-related messages are useful in political corruption response. As a way to form mass opinions and social norms (Qu et al., 2011), opinion sharing and exchange on microblogging systems will attract the attention of traditional media. Thus, it would expand the social influence of Lei's affair and accelerate government agencies' desire to find out the truth with all the pressure from public opinion.

Emotion-related messages increased from 7.01 percent to 10.43 percent, with messages expressing amusement increasing the most. Postman (2006) claimed that entertainment has been a way for society to conduct important business. In his words, "Our politics, religion, news, athletics, education and commerce have been transformed into congenial adjuncts of show business, largely without protest or even much popular notice. The result is that we are a people on the verge of amusing ourselves to death" (Postman, 2006, p. 4). As a "spectator sport" in America, politics were affected by the characteristics of show business, such as drama, imagery, and humor. Amusement seems to be an inevitable part of social interaction. During the last 31.5-hour period, messages expressing amusement increased. More and more Sina Weibo users were amused by increasing jokes, doggerels, and cartoons making fun of Lei Zhengfu. This particular phenomenon, amusing people during a serious political corruption issue, has demonstrated that people are in the age of "amusing ourselves to death" (Postman, 2006).

Snark-related messages increased by 5.60 percent, from 10.19 percent to 15.79 percent. Being snarky is not a new phenomenon in present society. Being snarky results from distrust in the government and dissatisfaction with institutions (Weeks, 2013). Less freedom of expression is an important reason for people to be cynical towards large institutions

(Weeks, 2013). Even with the development of Lei's affair many Sina Weibo users still felt insecure to express their opinions directly. Thus, they chose an indirect way to participate in the response. Within the snark-related messages, there are witty messages that account for a large proportion, while insulting messages are a smaller proportion. Unreasonable users, who posted messages simply expressed insulting, still existed.

H1a states that information messages are more likely to be re-posted, which is not supported by this study. First, among four major categories, the snark-related messages ranked first with a re-post rate of 36.50 percent. Information-related messages rank only in third place. Opinion-related and emotion-related messages rank second and fourth. This result is incongruent with research by Qu et al. (2011). In their research (Qu et al., 2011), information-related messages enjoyed the highest re-post rate of 47.10 percent. The re-post rates of opinion-related and emotion-related messages were 14.7 percent and 17.3 percent. The explanation for this difference could be: natural disasters involve life or death situations, while political corruption affairs invite sarcasm. During natural disasters, people were forced to face the loss of lives, and were touched by the courage and insistence of being. People were eager to learn the current situation of areas affected by the disaster, so that they could offer help. Thus, during natural disasters, information-related messages are re-posted the most. Contradictorily, during political corruption, the situation is different. People have a strong desire to express opinions and exchange ideas. However, censorship is strict in China. The government's Internet police force employs an estimated 350,000 people to review the content on websites, not including the censors that private firms must hire (The Atlantic, 2013).

H1b stating messages with multimedia contents are more likely to be re-posted is not supported by this study. Based on the sampled messages, the proportion of messages containing multimedia contents is slightly higher than the ones which did not contain

multimedia contents. These results are incongruent with previous studies (Zarrella, 2009 & Suh et al., 2010) that claim that the presence of URLs will help increase the re-post rate. However, the finding in this study still needs to be tested. This is because of the unique characteristics of Lei's affair. The multimedia contents, screenshots and videos, made Lei's political corruption public. In addition, few new visual images were released by the Chinese government, which decreased the need to re-post messages containing multimedia decreased.

H1c stating messages posted by verified Sina Weibo users were more likely to be re-posted is supported by the findings of this study. Trust is able to facilitate learning (Choi & Lee, 2000) and knowledge exchange (Davenport & Prusak, 1998) among individuals, increase cooperation, and improve a relationship's quality (Hagar, 2013). The system of verification is able to increase credibility of the verified users, making messages posted by them more credible than others. It makes a more wholesome filtering system needed to filter inveracious information, thus preventing the rumor-mongering. However, how to master the power between censorship and the filtering system is an important problem that the Sina Weibo is faced with.

Limitations

The main limitation of this study was the process of data collection. The 1,861 sampled messages were retrieved by searching keywords "Lei Zhengfu." This may result in a loss of relevant messages that do not contain the searching keywords.

Although Sina Weibo is the most influential microblogging system in China, the findings of this study may not be applied to other microblogging systems such as Tencent Weibo, Sohu Weibo, NetEase Weibo, and Phoenix.

Finally, the findings of this study may not be generalized to all political corruptions because of the specific characteristics of Lei's affair.

Future Research

In the future, researchers in this area could consider examining factors that affect the process of information dissemination in microblogging systems in China. Researchers could choose multiple political scandals and establish comparisons among them to determine the similarities and differences. Researchers could also consider making comparisons among multiple microblogging systems. It would also be interesting to compare Chinese Weibo and Twitter, two large microblogging systems in two different cultural environments and political systems. Further studies would put emphasis on how political structures such as regulations or censorship affect the dissemination of political corruption responses.

Conclusion

This study attempted to fill the gap left by previous research (Goh et al., 2011 & Jansen et al., 2005 & Koop et al., 2009 & Larsson et al., 2011 & Meeyoung et al., 2010 & Qu et al., 2009 & Qu et al., 2011) by examining how political corruption related information spread within microblogging systems in China. Demonstrated by this study, the informatics of political corruption scandals shares some similarities with the informatics of natural disasters. In both environment of informatics, information, opinion, and emotion messages were identified. The role played by Sina Weibo as a platform of information spreading, opinion exchange, and emotion release cannot be dismissed. When the freedom of speech is limited with China, the Internet users tend to use the form of entertainment to gain more of them. Trust is an important element during the process of knowledge exchange, which made verified users enjoyed higher credibility during crisis informatics. Multimedia have a stronger power during responses of natural disasters than that of political corruptions because of the limited political-sensitive information released by the Chinese government.

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